

Claims:

What is claimed is:

- 5 1. A metal halide lamp having a ceramic discharge vessel, the discharge vessel having two ends which are closed off by stoppers, and an electrically conductive leadthrough being guided through this stopper, an electrode with a shank being secured to the leadthrough, which electrode projects into the interior of the discharge vessel, the leadthrough and electrode together being referred to as an electrode system, wherein the electrode system comprises two components, which are designed as pins of different diameter, the 15 larger component being a niobium pin and the smaller component, which adjoins it on the inner, discharge side, being a pin made from molybdenum or tungsten which is fitted in a bore in the niobium pin, the ratio of the diameter of the smaller component to that of the 20 Nb pin being between 30 and 65%, and the pin which has been fitted in being secured in the bore by means of a mechanical pressing operation.
- 25 2. The metal halide lamp as claimed in claim 1, wherein the mechanical pressing operation is realized by crimping or clamping.
- 30 3. The metal halide lamp as claimed in claim 1, wherein the smaller component is an electrode shank made from tungsten.
- 35 4. The metal halide lamp as claimed in claim 1, wherein the smaller component is a pin made from molybdenum as the inner part of the leadthrough.
5. The metal halide lamp as claimed in claim 1, wherein the bore is from 0.8 to 2.5 mm deep.

6. The metal halide lamp as claimed in claim 1, wherein in terms of diameter the bore is matched to the pin which is to be fitted in.

5 7. The metal halide lamp as claimed in claim 1, wherein the bore has an encircling wall.

8. The metal halide lamp as claimed in claim 1, wherein the bore is slotted and has at least two
10 tongues.

9. An electrode system for a metal halide lamp with ceramic discharge vessel, wherein the electrode system comprises two components, which are designed as pins of
15 different diameter, the larger component being a niobium pin and the smaller component being a pin made from molybdenum or tungsten which is fitted in a bore in the niobium pin, the ratio of the diameter of the smaller component to that of the Nb pin being between
20 30 and 65%, and the pin which has been fitted in being secured in the bore by means of a mechanical pressing operation.

10. A process for producing an electrode system which comprises two components which are designed as pins of different diameter, the larger component being a niobium pin and the smaller component being a pin made from molybdenum or tungsten, the niobium pin having a bore for receiving the smaller component, the ratio of
25 the diameter of the smaller component to that of the Nb pin being between 30 and 65%, comprising the following process steps:

- 30 a) fitting of the smaller component into the niobium pin;
- 35 b) securing of the fitted-in pin in the bore by means of a mechanical pressing operation, in particular crimping or clamping.